

## **Appendix A**

We allow Comsat to impose upon users of direct access a surcharge of up to 5.58% over INTELSAT's IUC. The components of the surcharge include an amount for certain Signatory related expenses (1.94%) , recovery of past insurance expenses (3.59%), and recovery of headquarters expenses (0.05%). The calculations used to support these surcharges are explained in Appendix B and C.

**Table - A**  
**Total Surcharge**

	<b>% of the IUC</b>
<b>Components of Surcharges</b>	
Signatory Related Expenses (see Appendix B)	1.94%
Recovery of Past Insurance Expenses (see Appendix B)	3.59%
Recovery of Comsat Headquarters Expenses (see Appendix B)	0.05%
Total Surcharge	5.58%

## **Appendix B**

### **Calculation of Surcharge for Signatory Related Expenses**

Appendix B illustrates the methodology used to determine the permitted surcharge for certain Signatory-related expenses.

As discussed in the Order, the Commission permits Comsat to recover Signatory function expenses, capitalized insurance expense for launches and satellites not insured by INTELSAT, and headquarters account expenses. We find that a surcharge should be calculated by determining what percentage a given expense constitutes of the total IUC payments attributed to U.S. usage and then apply this uniform percentage to the IUC rate. We use the year 1998 as the base year from which to estimate a surcharge. Note: IUC payments for the year 1998 totaled \$154.77 million, as provided by Comsat.

#### **Signatory Function Expenses**

Comsat incurred \$3.005 million in Signatory function expenses. This translates into Signatory function expenses representing 1.94% of total IUC payments made by Comsat in 1998. Assuming 1998 data represents a reasonable estimate of the Signatory function expenses to be incurred by Comsat in the future, Comsat would incur a Signatory function expense of 1.94 cents for each IUC dollar generated in the U.S. for the year 1998. Or, in another sense, Signatory function expenses represent a rate of 1.94% for each IUC dollar attributed to U.S. usage. We therefore conclude that a surcharge of 1.94% for Signatory function expenses would be reasonable.

#### **Insurance Expense**

Comsat has \$22.21 million in capitalized insurance expense attributed to INTELSAT not insuring, or under-insuring, the costs of satellite deployment. This number was calculated by FCC staff as shown in Appendix C. We permit Comsat to include a surcharge for depreciation on this insurance.

The depreciation expense is based on depreciating the capitalized insurance over four years, using a straight line depreciation method. This methodology results in a depreciation expense of \$5.55 million per year. (Note that the depreciation method we use here parallels Comsat's annualized depreciation rate.)

The total expenses for insurance expense recovery amount to \$5.553 million, which represents 3.59% of the IUC payments attributed to U.S. usage in 1998. Therefore, we conclude that a surcharge of up to 3.59% for insurance expense recovery would be reasonable.

#### **Headquarters Account Expense**

Comsat has \$330,000 in its capitalized headquarters account expense. We permit Comsat to include a surcharge for depreciation of those capitalized expenses.

The depreciation expense is based on depreciating the capitalized insurance over four years, using a straight line depreciation method. This methodology results in a depreciation expense of \$82,500 per year (\$333,000/4 years).

The total expenses for capitalized headquarters account expense amounts to \$82,500 which represents

.05% of the IUC payments attributed to U.S. usage in 1998. Therefore, we find that a surcharge of up to .05% for headquarters account expenses would be reasonable.

**Total Surcharge for Signatory-Related Expenses**

The total surcharge for Signatory-related expenses amounts to 5.58%, which represents the sum of the surcharges for: Signatory function expenses (1.94%), insurance recovery (3.59%), and Headquarters Account Expenses (.05%).

**Table - B**  
**Calculation of Surcharge Signatory Related Expenses**

	1998 Data	1998 % of IUC
Estimated 1998 IUC to INTELSAT *	\$154,770,000	
Signatory - Related Expenses:		
Signatory Function Expenses *	\$3,004,603	1.94%
Insurance Expense Recovery		
Capitalized Insurance (see Appendix C)	\$22,212,000	
Annual Depreciation Insurance Expenses	\$5,553,000	3.59%
Headquarters Account Expense		
Capitalized Headquarters Expense **	\$330,000	
Depreciation Expenses	\$82,500	0.05%
Total signatory Related Expenses	\$8,640,103	5.58%
<p>Sources:</p> <p>* COMSAT - Ted Boll Original Affidavit, 12/29/1998</p> <p>** COMSAT Ex Parte Statement, June 11, 1999</p>		

## **Appendix C**

### **Calculation of Capitalized Insurance**

The table in Appendix C illustrates the methodology used to determine capitalized insurance attributed to INTELSAT not insuring, or under-insuring, the costs of satellite deployment.

Comsat provided the Commission data about the insurance it has purchased on launch and post-separation, as well as top-off insurance. It did not provide the Commission a detailed depreciation schedule for insurance. As a result, Comsat failed to illustrate the calculation to support the \$31 million of insurance it claims remains capitalized, or undepreciated.

Commission staff calculated the undepreciated amount of Comsat's insurance expenses for each satellite, excluding Comsat's expenditures for insurance on the original insurance. The calculation only includes insurance purchased by Comsat and does not include insurance purchased by INTELSAT. Column 12 in the table shows the Commission's estimation of the undepreciated amount of insurance. The amount in Column 12 is based on calculating the total amount of insurance payments incurred by Comsat after excluding insurance on insurance, (Column 9), and then calculating the depreciation expense per year based on the life of the satellites (Column 10). The depreciation per year is then multiplied by years remaining for the different satellites (Column 11) to arrive at the total estimated undepreciated amount (Column 12). The total is \$22.212 million.

Table - C

## Calculation of Capitalized Insurance

COMSAT Provided Data								FCC Staff Estimate *				
Satellite	Launch Date (1)	Comsat (CQ) Insurance Premium (\$M)					Depr. Year (7)	Insurance's Ins % (8)=(6)/(5)	CQ Adjusted Own Ins. w/o Ins.'s Ins. (9)= (5)-(2)-(6)	Estimated Ins Depr./Yr. (w/o Ins.'s Ins.) (10) = (9)/(7)	Remaining <sup>1</sup> LHe years (manual count) (11)= (7) -(1)	Estimated Undepr. Ins. (12)= (9)- ((10)* ((7)-(11)))
		Share of INTELSAT (2)	Comsat's Own Ins. Launch (3)	Post-Sep. (4)	Total (Incl. top-off Ins.) (5)=(2+3+4)	Comsat Ins.'s Ins. part (6) **						
601	Oct-91	Not Insured										
602	Oct-89	Not Insured										
603	Mar-90	Not Insured										
603 Reboost	May-92	Not Insured	Lump Sum Insurance									
604	Jun-90	Not Insured										
605	Aug-91	Not Insured										
6 Series Total		Not Insured			\$54.800	\$7.976	10	14.55%	\$46.824	\$4.682	3.0	\$14.047
IS K	Jun-92	Not Insured	\$7.525	\$1.475	\$9.000	\$1.299	10	14.43%	\$7.701	\$0.770	4.0	\$3.080
701	Oct-93	\$4.191	\$0.712	\$0.422	\$5.325	\$0.468	11	8.78%	\$0.688	\$0.061	6.0	\$0.383
702	Jun-94	\$4.218	\$0.712	\$0.422	\$5.352	\$0.471	11	8.80%	\$0.683	\$0.060	6.5	\$0.392
703	Oct-94	\$4.805	\$0.888	\$0.422	\$5.915	\$0.622	11	10.52%	\$0.688	\$0.063	7.0	\$0.438
704	Jan-95	\$4.621	\$0.888	\$0.422	\$5.931	\$0.624	11	10.52%	\$0.688	\$0.062	7.0	\$0.437
705	Mar-95	\$4.406	\$0.888	\$0.422	\$5.716	\$0.601	11	10.51%	\$0.709	\$0.064	7.0	\$0.451
706	May-95	\$4.910	\$1.041	\$0.645	\$6.596	\$0.548	11	8.31%	\$1.138	\$0.103	7.5	\$0.776
707	Mar-96	\$5.010	\$1.173	\$0.645	\$6.828	\$0.638	11	9.34%	\$1.180	\$0.107	8.5	\$0.912
709	Jun-96	\$2.884	\$0.611	\$0.645	\$4.150	\$0.369	11	8.69%	\$0.687	\$0.061	8.5	\$0.685
Total 7 series		\$34.855	\$6.913	\$4.045	\$45.813	\$4.341		9.48%	\$6.617	\$0.602		\$4.454
801	Mar-97	\$4.831	\$0.514	\$0.809	\$6.154	\$0.611	11	13.18%	\$0.512	\$0.047	9.0	\$0.419
802	Jun-97	\$5.029	\$0.526	\$0.471	\$6.026	\$0.794	11	13.18%	\$0.203	\$0.018	9.5	\$0.175
803 ***	Sep-97	\$2.485	N/A		\$2.485	\$0.000	11	12.75%	\$0.000	\$0.000	10.0	\$0.000
804 ***	Dec-97	\$2.549	N/A		\$2.549	\$0.000	11	12.75%	\$0.000	\$0.000	10.0	\$0.000
805 ***	Jun-98	\$6.103	N/A		\$6.103	\$0.000	11	12.75%	\$0.000	\$0.000	10.5	\$0.000
806	Feb-98	\$3.087	\$0.309	(combined)	\$3.396	\$0.269	11	7.92%	\$0.040	\$0.004	10.0	\$0.036
Total 8 series		\$24.094	\$1.349	\$1.280	\$26.723	\$1.874		7.01%	\$0.755			\$0.631
Total		\$58.949	\$15.787	\$6.600	\$136.336	\$15.490		11.38%	\$61.697	\$6.054		\$22.212

Comsat filing - 6/11/99 Ex Parte

\$30.700

Difference - after Staff adjustment of top-off insurance

\$8.488

\* Due to insufficient information provided by Comsat, we have to make our own calculation based on the information on hand. However, we have tested our model by using the total insurance amount as Comsat used (including top-off insurance). The model generated total undepreciated capital insurance of \$29.3 M, which is very close to the number Comsat provided in their statement - \$30.7 M (Comsat June 11, 1999 Ex Parte Statement). Therefore, we feel comfortable using this model to calculate an adjusted capitalized insurance amount, i.e. without top-off insurance.

\*\* Top-off insurance is already included in Comsat's total insurance column, Comsat Ex Parte Statement, June 28, 1999.

\*\*\* Comsat did not list any direct insurance (outside INTELSAT's insurance), yet it listed top-off insurance amount.

## Sources:

Comsat Ex Parte Statement, June 11, 1999

Comsat Ex Parte Statement, June 28, 1999

## **Appendix D**

### **Savings After Permitting Surcharge for Switched Voice and Private Line Services**

The savings are calculated by comparing Comsat's current tariff rates to Intelsat's tariff rates, after including a surcharge of 5.58% (see Appendix A). Using the first line item in Voice IDR as an example, Comsat's current rate is \$1000 per month. The rate under direct access is \$295 per month. The rate under direct access after permitting a surcharge of 5.58% is \$311 per month. For an INTELSAT user that takes advantage of direct access, the user would save \$689 per month. This translates into a savings of 68.9% ( $\$689/\$1000$ ). Savings for the major IDR and IBS services after the direct access surcharge are shown in the table in Appendix D.



**Table - D**  
**Major IDR and IBS Services Savings After D-A Surcharge**

Coverage	Capacity/ Data rate	Term	Earth Station Standard By Antenna Size		INTELSAT (IS)	Comsat (CQ)	After D-A Surcharge 5.58% above IUC	Direct Access Savings 1-(Adj. IUC/CQ) (%)
			Std A=15-18 Meters	Std B=10-13 Meters	Tariff	Tariff		
			Std C=11-14 Meters	(IUC) (\$/mo.)	(\$/Mo.)			
Voice - IDR (International Digital Route):								
Hemi/Zone/ Ku-band	0 - 270 Ckts:							
	IDR - 64 kb/s	5-Year	A/C	\$295	\$1,000	\$311	68.9%	
	IDR - 64 kb/s	7-Year	A/C	\$265	\$640	\$280	56.3%	
	IDR - 64 kb/s	10-Year	A/C	\$250	\$515	\$264	48.7%	
	IDR - 64 kb/s	15-Year	A/C	\$240	\$475	\$253	46.7%	
	271 - 630 Ckts:							
	IDR - 64 kb/s	5-Year	A/C	\$295	\$1,000	\$311	68.9%	
	IDR - 64 kb/s	7-Year	A/C	\$265	\$580	\$280	51.8%	
	IDR - 64 kb/s	10-Year	A/C	\$250	\$460	\$264	42.6%	
	IDR - 64 kb/s	15-Year	A/C	\$240	\$425	\$253	40.4%	
	631 - 1080 Ckts:							
	IDR - 64 kb/s	5-Year	A/C	\$295	\$1,000	\$311	68.9%	
	IDR - 64 kb/s	7-Year	A/C	\$265	\$525	\$280	46.7%	
	IDR - 64 kb/s	10-Year	A/C	\$250	\$410	\$264	35.6%	
	IDR - 64 kb/s	15-Year	A/C	\$240	\$375	\$253	32.4%	
	Above 1080 Ckts:							
	IDR - 64 kb/s	5-Year	A/C	\$295	\$1,000	\$311	68.9%	
	IDR - 64 kb/s	7-Year	A/C	\$265	\$475	\$280	41.1%	
	IDR - 64 kb/s	10-Year	A/C	\$250	\$365	\$264	27.7%	
	IDR - 64 kb/s	15-Year	A/C	\$240	\$330	\$253	23.2%	
Hemi/Zone/ Ku-band	0 - 270 Ckts:							
	IDR - 1.544 Mb/s	5-Year	A/C	\$6,270	\$23,040	\$6,620	71.3%	
	IDR - 1.544 Mb/s	7-Year	A/C	\$5,745	\$14,760	\$6,066	58.9%	
	IDR - 1.544 Mb/s	10-Year	A/C	\$5,425	\$11,880	\$5,728	51.8%	
	IDR - 1.544 Mb/s	15-Year	A/C	\$4,750	\$10,440	\$5,015	52.0%	

**Table - D**  
**Major IDR and IBS Services Savings After D-A Surcharge**

Coverage	Capacity/ Data rate	Term	Earth Station Standard By Antenna Size		INTELSAT (IS)	Comsat (CQ)	After D-A Surcharge 5.58% above IUC	Direct Access Savings 1-(Adj. IUC/CQ) (%)
			Std A=15-18 Meters	Std B=10-13 Meters	Tariff (IUC) (\$/mo.)	Tariff (\$/Mo.)		
			Std C=11-14 Meters					
271 - 630 Ckts:								
	IDR - 1.544 Mb/s	5-Year	A/C		\$6,270	\$23,040	\$6,620	71.3%
	IDR - 1.544 Mb/s	7-Year	A/C		\$5,745	\$13,320	\$6,066	54.5%
	IDR - 1.544 Mb/s	10-Year	A/C		\$5,425	\$10,680	\$5,728	46.4%
	IDR - 1.544 Mb/s	15-Year	A/C		\$4,750	\$9,360	\$5,015	46.4%
631 - 1080 Ckts:								
	IDR - 1.544 Mb/s	5-Year	A/C		\$6,270	\$23,040	\$6,620	71.3%
	IDR - 1.544 Mb/s	7-Year	A/C		\$5,745	\$12,120	\$6,066	50.0%
	IDR - 1.544 Mb/s	10-Year	A/C		\$5,425	\$9,480	\$5,728	39.6%
	IDR - 1.544 Mb/s	15-Year	A/C		\$4,750	\$8,280	\$5,015	39.4%
Above 1080 Ckts:								
	IDR - 1.544 Mb/s	5-Year	A/C		\$6,270	\$23,040	\$6,620	71.3%
	IDR - 1.544 Mb/s	7-Year	A/C		\$5,745	\$10,920	\$6,066	44.5%
	IDR - 1.544 Mb/s	10-Year	A/C		\$5,425	\$8,400	\$5,728	31.8%
	IDR - 1.544 Mb/s	15-Year	A/C		\$4,750	\$7,320	\$5,015	31.5%
Hemi/Zone/ Spot	0 - 270 Ckts:							
	IDR - 2.048 Mb/s	5-Year	A/C		\$7,790	\$28,800	\$8,225	71.4%
	IDR - 2.048 Mb/s	7-Year	A/C		\$7,180	\$18,450	\$7,581	58.9%
	IDR - 2.048 Mb/s	10-Year	A/C		\$6,785	\$14,850	\$7,164	51.8%
	IDR - 2.048 Mb/s	15-Year	A/C		\$5,985	\$13,050	\$6,319	51.6%
271 - 630 Ckts:								
	IDR - 2.048 Mb/s	5-Year	A/C		\$7,790	\$28,800	\$8,225	71.4%
	IDR - 2.048 Mb/s	7-Year	A/C		\$7,180	\$16,650	\$7,581	54.5%
	IDR - 2.048 Mb/s	10-Year	A/C		\$6,785	\$13,350	\$7,164	46.3%
	IDR - 2.048 Mb/s	15-Year	A/C		\$5,985	\$11,700	\$6,319	46.0%

**Table - D**  
**Major IDR and IBS Services Savings After D-A Surcharge**

Coverage	Capacity/ Data rate	Term	Earth Station Standard	INTELSAT (IS)	Comsat (CQ)	After D-A Surcharge 5.58% above IUC	Direct Access Savings 1-(Adj. IUC/CQ) (%)
			By Antenna Size	Tariff	Tariff		
			Std A=15-18 Meters Std B=10-13 Meters Std C=11-14 Meters	(IUC) (\$/mo.)	(\$/Mo.)		
631 - 1080 Ckts:							
	IDR - 2.048 Mb/s	5-Year	A/C	\$7,790	\$28,800	\$8,225	71.4%
	IDR - 2.048 Mb/s	7-Year	A/C	\$7,180	\$15,150	\$7,581	50.0%
	IDR - 2.048 Mb/s	10-Year	A/C	\$6,785	\$11,850	\$7,164	39.5%
	IDR - 2.048 Mb/s	15-Year	A/C	\$5,985	\$10,350	\$6,319	38.9%
Above 1080 Ckts:							
	IDR - 2.048 Mb/s	5-Year	A/C	\$7,790	\$28,800	\$8,225	71.4%
	IDR - 2.048 Mb/s	7-Year	A/C	\$7,180	\$13,650	\$7,581	44.5%
	IDR - 2.048 Mb/s	10-Year	A/C	\$6,785	\$10,500	\$7,164	31.8%
	IDR - 2.048 Mb/s	15-Year	A/C	\$5,985	\$9,150	\$6,319	30.9%
Data - IBS (INTELSAT Business Services):							
Hemi/Zone/ (C-band)	IBS - 64 kb/s	1-Year	A/B	\$370	\$465	\$391	16.0%
	IBS - 64 kb/s	2-Year	A/B	\$350	\$460	\$370	19.7%
	IBS - 64 kb/s	3-Year	A/B	\$320	\$425	\$338	20.5%
	IBS - 64 kb/s	5-Year	A/B	\$295	\$395	\$311	21.1%
	IBS - 64 kb/s	7-Year	A/B	\$265	\$370	\$280	24.4%
	IBS - 64 kb/s	10-Year	A/B	\$250	\$350	\$264	24.6%
	IBS - 1.544 Mb/s	1-Year	A/B	\$7,980	\$10,305	\$8,425	18.2%
	IBS - 1.544 Mb/s	2-Year	A/B	\$7,580	\$9,930	\$8,003	19.4%
	IBS - 1.544 Mb/s	3-Year	A/B	\$6,945	\$9,435	\$7,333	22.3%
	IBS - 1.544 Mb/s	5-Year	A/B	\$6,270	\$8,515	\$6,620	22.3%
	IBS - 1.544 Mb/s	7-Year	A/B	\$5,745	\$8,130	\$6,066	25.4%
	IBS - 1.544 Mb/s	10-Year	A/B	\$5,425	\$7,420	\$5,728	22.8%
	IBS - 2.048 Mb/s	1-Year	A/B	\$9,975	\$13,740	\$10,532	23.4%
	IBS - 2.048 Mb/s	2-Year	A/B	\$9,475	\$13,245	\$10,004	24.5%
	IBS - 2.048 Mb/s	3-Year	A/B	\$8,680	\$12,580	\$9,164	27.2%
	IBS - 2.048 Mb/s	5-Year	A/B	\$7,790	\$11,350	\$8,225	27.5%
	IBS - 2.048 Mb/s	7-Year	A/B	\$7,180	\$10,840	\$7,581	30.1%
	IBS - 2.048 Mb/s	10-Year	A/B	\$6,785	\$9,895	\$7,164	27.6%

**Table - D**  
**Major IDR and IBS Services Savings After D-A Surcharge**

Coverage	Capacity/ Data rate	Term	Earth Station Standard	INTELSAT (IS)	Comsat (CQ)			After D-A Surcharge 5.58% above IUC	Direct Access Savings 1-(Adj. IUC/CQ) (%)
			By Antenna Size Std A=15-18 Meters Std B=10-13 Meters Std C=11-14 Meters	Tariff (IUC) (\$/mo.)	Tariff (\$/Mo.)				
Spot (Ku-band)	IBS - 64 kb/s	1-Year	C	\$370	\$585			\$391	33.2%
	IBS - 64 kb/s	2-Year	C	\$350	\$570			\$370	35.2%
	IBS - 64 kb/s	3-Year	C	\$320	\$535			\$338	36.8%
	IBS - 64 kb/s	5-Year	C	\$295	\$495			\$311	37.1%
	IBS - 64 kb/s	7-Year	C	\$265	\$460			\$280	39.2%
	IBS - 64 kb/s	10-Year	C	\$250	\$435			\$264	39.3%
Spot (Ku-band)	IBS - 1.544 Mb/s	1-Year	C	\$7,980	\$12,885			\$8,425	34.6%
	IBS - 1.544 Mb/s	2-Year	C	\$7,580	\$12,415			\$8,003	35.5%
	IBS - 1.544 Mb/s	3-Year	C	\$6,945	\$11,745			\$7,333	37.6%
	IBS - 1.544 Mb/s	5-Year	C	\$6,270	\$10,640			\$6,820	37.8%
	IBS - 1.544 Mb/s	7-Year	C	\$5,745	\$10,105			\$6,066	40.0%
	IBS - 1.544 Mb/s	10-Year	C	\$5,425	\$9,275			\$5,728	38.2%
	IBS - 2.048 Mb/s	1-Year	C	\$9,975	\$17,180			\$10,532	
	IBS - 2.048 Mb/s	2-Year	C	\$9,475	\$16,555			\$10,004	39.6%
	IBS - 2.048 Mb/s	3-Year	C	\$8,680	\$15,660			\$9,164	41.5%
	IBS - 2.048 Mb/s	5-Year	C	\$7,790	\$14,185			\$8,225	42.0%
	IBS - 2.048 Mb/s	7-Year	C	\$7,180	\$13,475			\$7,581	43.7%
	IBS - 2.048 Mb/s	10-Year	C	\$6,785	\$12,365			\$7,164	42.1%

\* Due to unlimited combinations of service offerings, depending on parameters, such as transponder type, beam coverage, data rate, earth station type, and transmission power, this table only lists the most popular combinations at various available service duration offerings among major services - Voice (IDR), Data (IBS), and Video services (full-time and occasional use).

**Sources:**

- (1) INTELSAT Tariff - BG 118-18, May 8, 1997.
- (2) COMSAT Tariff (FCC No.3):
  - IDR - June 26, 1999, p. 96.
  - IBS - June 26, 1999, p. 118.

## **Appendix E**

### **Savings After Permitting Surcharge for Full Time and Occasional-Use Video Services**

The savings are calculated by comparing Comsat's current tariff rates to Intelsat's tariff rates, after including a surcharge of 5.58% (see Appendix A). Using the first line item in listed in the Appendix E table, Comsat's current rate is \$1,972,800 per year. The rate under direct access is \$1,440,000 per year. The rate under direct access after permitting a surcharge of 5.58% is \$1,520,352 per year. For a INTELSAT user that takes advantage of direct access, the user would save \$452,448 per year (\$1,972,800 - \$1,520,352). This translates into a savings of 22.93% (\$452,448/\$1,972,800). Savings for the major video services after the direct access surcharge are shown in the table in Appendix E.

**Table - E**  
**Major Video Leases Savings After D-A Surcharge**

Frequency Band	Capacity	Power (Standard/High)	Term	Preemptible (P - cancelable) or Non-Preempt. (N/P) (non-cancelable)	INTELSAT (IS) Tariff (IUC) (\$/Yr.)	Comsat (CQ) Tariff ** (\$/Yr.)	After D - A Surcharge 5.58% above IUC	Direct-Access Savings 1-(Adj. IUC / CQ) (%)
Full-Time Video:								
C/Hemi/Zone	36 MHz	Std	5-Year	N/P	\$1,440,000	\$1,972,800	\$1,520,352	22.93%
C/Hemi/Zone	36 MHz	Std	10-Year	N/P	\$1,200,000	\$1,786,800	\$1,266,960	29.09%
C/Hemi/Zone	72 MHz	Std	5-Year	N/P	\$2,375,000	\$3,646,920	\$2,507,525	31.24%
C/Hemi/Zone	72 MHz	Std	10-Year	N/P	\$1,985,000	\$3,233,640	\$2,095,763	35.19%
C/Global	36 MHz	Std	5-Year	N/P	\$2,455,000	\$3,105,840	\$2,591,989	16.54%
C/Global	36 MHz	Std	10-Year	N/P	\$2,110,000	\$2,753,640	\$2,227,738	19.10%
Ku	36 MHz	Std	5-Year	N/P	\$1,770,000	\$2,239,200	\$1,868,768	16.54%
Ku	36 MHz	Std	10-Year	N/P	\$1,510,000	\$1,980,000	\$1,594,258	19.48%
Ku	72 MHz	Std	5-Year	N/P	\$2,840,000	\$3,732,000	\$2,998,472	19.66%
Ku	72 MHz	Std	10-Year	N/P	\$2,425,000	\$3,300,000	\$2,560,315	22.41%
INTELSAT K (H5-H8 Transponders)								
(IS Std Rate)	27 MHz	Std	5-Year	N/P	\$1,770,000	\$2,192,040	\$1,868,768	14.75%
	27 MHz	Std	10-Year	N/P	\$1,510,000	\$1,980,000	\$1,594,258	19.48%
(IS Std Rate)	54 MHz	Std	5-Year	N/P	\$2,840,000	\$3,639,000	\$2,998,472	17.60%
	54 MHz	Std	10-Year	N/P	\$2,425,000	\$3,300,000	\$2,560,315	22.41%
C-Hemi	36 MHz	Std	1-Year	P	\$1,000,000	\$1,182,840	\$1,055,800	10.74%
C-Hemi	36 MHz	Std	2-Year	P	\$955,000	\$1,135,680	\$1,008,289	11.22%
C-Hemi	36 MHz	Std	5-Year	P	\$810,000	\$1,005,000	\$855,198	14.91%
C-Hemi	36 MHz	Std	7-Year	P	\$755,000	\$945,720	\$797,129	15.71%
C-Hemi	36 MHz	Std	10-Year	P	\$675,000	\$863,280	\$712,865	17.45%
C-Hemi	72 MHz	Std	1-Year	P	\$1,610,000	\$1,971,480	\$1,699,838	13.78%
C-Hemi	72 MHz	Std	2-Year	P	\$1,540,000	\$1,892,760	\$1,625,932	14.10%
C-Hemi	72 MHz	Std	5-Year	P	\$1,335,000	\$1,674,960	\$1,409,493	15.85%
C-Hemi	72 MHz	Std	7-Year	P	\$1,250,000	\$1,576,200	\$1,319,750	16.27%
C-Hemi	72 MHz	Std	10-Year	P	\$1,115,000	\$1,438,800	\$1,177,217	18.18%

**Table - E**  
**Major Video Leases Savings After D-A Surcharge**

Frequency Band	Capacity	Power (Standard/High)	Term	Preemptible (P - cancelable) or Non-Preempt. (N/P) (non-cancelable)	INTELSAT (IS) Tariff (IUC) (\$/Yr.)	Comsat (CQ) Tariff ** (\$/Yr.)	After D - A Surcharge 5.58% above IUC	Direct-Access Savings 1-Adj. IUC / CQ (%)
Ku - Spot	36 MHz	Std	1-Year	P	\$1,485,000	\$1,881,840	\$1,567,863	16.68%
Ku - Spot	36 MHz	Std	2-Year	P	\$1,440,000	\$1,806,720	\$1,520,352	15.85%
Ku - Spot	36 MHz	Std	5-Year	P	\$1,300,000	\$1,598,880	\$1,372,540	14.16%
Ku - Spot	36 MHz	Std	7-Year	P	\$1,225,000	\$1,504,560	\$1,293,355	14.04%
Ku - Spot	36 MHz	Std	10-Year	P	\$1,110,000	\$1,373,400	\$1,171,938	14.67%
Ku - Spot	72 MHz	Std	1-Year	P	\$2,380,000	\$3,136,440	\$2,512,804	19.88%
Ku - Spot	72 MHz	Std	2-Year	P	\$2,310,000	\$3,011,160	\$2,438,898	19.00%
Ku - Spot	72 MHz	Std	5-Year	P	\$2,085,000	\$2,684,720	\$2,201,343	17.39%
Ku - Spot	72 MHz	Std	7-Year	P	\$1,965,000	\$2,507,520	\$2,074,647	17.26%
Ku - Spot	72 MHz	Std	10-Year	P	\$1,785,000	\$2,289,000	\$1,884,603	17.67%
C/Global	36 MHz	Std	1-Year	P	\$1,595,000	\$1,989,360	\$1,684,001	15.35%
C/Global	36 MHz	Std	2-Year	P	\$1,545,000	\$1,909,920	\$1,631,211	14.59%
C/Global	36 MHz	Std	5-Year	P	\$1,400,000	\$1,680,200	\$1,478,120	12.55%
C/Global	36 MHz	Std	7-Year	P	\$1,320,000	\$1,580,480	\$1,393,658	12.38%
C/Global	36 MHz	Std	10-Year	P	\$1,205,000	\$1,451,880	\$1,272,239	12.37%
Full-Time Video:								
C-Hemi	24 MHz	High	1-Year	P	\$1,065,000	\$1,301,280	\$1,124,427	13.59%
C-Hemi	24 MHz	High	2-Year	P	\$1,015,000	\$1,249,200	\$1,071,637	14.21%
C-Hemi	24 MHz	High	5-Year	P	\$835,000	\$1,105,580	\$881,593	20.26%
C-Hemi	24 MHz	High	7-Year	P	\$800,000	\$1,040,280	\$844,640	18.61%
C-Hemi	24 MHz	High	10-Year	P	\$715,000	\$949,680	\$754,897	20.51%
C-Hemi	36 MHz	High	1-Year	P	\$1,500,000	\$1,774,320	\$1,583,700	10.74%
C-Hemi	36 MHz	High	2-Year	P	\$1,430,000	\$1,703,520	\$1,509,794	11.37%
C-Hemi	36 MHz	High	5-Year	P	\$1,215,000	\$1,507,580	\$1,282,797	14.91%
C-Hemi	36 MHz	High	7-Year	P	\$1,135,000	\$1,418,640	\$1,198,333	15.53%
C-Hemi	36 MHz	High	10-Year	P	\$1,015,000	\$1,294,920	\$1,071,637	17.24%
Ku - Spot	36 MHz	High	1-Year	P	\$1,855,000	\$2,352,360	\$1,958,509	16.74%
Ku - Spot	36 MHz	High	2-Year	P	\$1,795,000	\$2,258,400	\$1,895,161	16.08%
Ku - Spot	36 MHz	High	5-Year	P	\$1,625,000	\$1,998,600	\$1,715,675	14.16%
Ku - Spot	36 MHz	High	7-Year	P	\$1,530,000	\$1,880,760	\$1,615,374	14.11%
Ku - Spot	36 MHz	High	10-Year	P	\$1,385,000	\$1,716,720	\$1,462,283	14.82%

**Table - E**  
**Major Video Leases Savings After D-A Surcharge**

Frequency Band	Capacity	Power (Standard/High)	Term	Preemptible (P - cancelable) or Non-Preempt. (N/P) (non-cancelable)	INTELSAT (IS) Tariff (IUC) (\$/Yr.)	Comsat (CQ) Tariff ** (\$/Yr.)	After D - A Surcharge 5.58% above IUC	Direct-Access Savings 1-(Adj. IUC / CQ) (%)
Ku - Spot	72 MHz	High	1-Year	P	\$2,975,000	\$3,920,520	\$3,141,005	19.88%
Ku - Spot	72 MHz	High	2-Year	P	\$2,880,000	\$3,763,920	\$3,040,704	19.21%
Ku - Spot	72 MHz	High	5-Year	P	\$2,605,000	\$3,330,960	\$2,750,359	17.43%
Ku - Spot	72 MHz	High	7-Year	P	\$2,455,000	\$3,134,400	\$2,591,989	17.31%
Ku - Spot	72 MHz	High	10-Year	P	\$2,225,000	\$2,861,280	\$2,349,155	17.90%
C/Global	24 MHz	High	1-Year	P	\$1,700,000	\$2,188,320	\$1,794,860	17.98%
C/Global	24 MHz	High	2-Year	P	\$1,650,000	\$2,100,960	\$1,742,070	17.08%
C/Global	24 MHz	High	5-Year	P	\$1,490,000	\$1,859,280	\$1,573,142	15.39%
C/Global	24 MHz	High	7-Year	P	\$1,405,000	\$1,749,600	\$1,483,399	15.21%
C/Global	24 MHz	High	10-Year	P	\$1,280,000	\$1,597,200	\$1,351,424	15.39%
C/Global	36 MHz	High	1-Year	P	\$2,395,000	\$2,984,040	\$2,528,641	15.26%
C/Global	36 MHz	High	2-Year	P	\$2,320,000	\$2,864,880	\$2,449,458	14.50%
C/Global	36 MHz	High	5-Year	P	\$2,100,000	\$2,535,360	\$2,217,180	12.55%
C/Global	36 MHz	High	7-Year	P	\$1,980,000	\$2,385,720	\$2,090,484	12.38%
C/Global	36 MHz	High	10-Year	P	\$1,805,000	\$2,177,880	\$1,905,719	12.50%
Occasional TV -								
Frequency Band	Capacity		Down Link (DL)	Preemptible (P)/ Non-Preempt. (N/P)	INTELSAT Tariff \$/ Minute	COMSAT Tariff \$/ Minute		
C/Globe Beam	18 MHz		Single DL	N/P	\$6.50	\$9.70	\$7	29.25%
C/Globe Beam	24 MHz		Single DL	N/P	\$9.00	N/A.		
C/Globe Beam	36/41 MHz		Single DL	N/P	\$13.00	\$19.40	\$14	29.25%

\*\* INTELSAT offers the "whole" transponder rate. To make a comparable comparison, the Comsat's tariff (which expressed in monthly charge for 1/2 transponder) has been converted to an annualized rate (i.e. multiple Comsat's monthly charges by 12\*2).

**Sources:**

- (1) INTELSAT Tariff - BG 118-18, May 8, 1997, also July, 1998.
- (2) COMSAT Tariff - COMSAT Tariff F.C.C. No. 3, June 26, 1999  
 Full - Time Video - p. 55, 56, 57, 70, 71  
 Occ. TV. - p. 29



**Separate Statement of Commissioner Harold W. Furchtgott-Roth**

**In the Matter of Direct Access to the INTELSAT System (IB Docket No. 89-182, File No. 60-SAT-ISP-97)**

Today's decision by the Commission to permit Level 3 direct access to the INTELSAT system is, in virtually all aspects, a sound conclusion that will inure to the benefit of U.S. carriers and consumers. I write separately to note that I would have gone further than the Commission has gone in one particular respect. As a part of today's order, the Commission restricts direct access for a certain class of carriers, namely, carriers (other than Comsat) who are INTELSAT signatories. Such signatories are prohibited from utilizing direct access for service to any foreign country in which that signatory uses 50 percent or more of all INTELSAT capacity used in that particular country.

This restriction is founded, as the argument goes, on concerns that signatories have potential incentives to act anticompetitively in the setting of the INTELSAT utilization charge (IUC) for direct access. Artificially low IUCs would be in these signatories' economic interest as purchasers of direct access in the U.S. On the other hand, low IUCs would be injurious to Comsat, which as a "carrier's carrier" relies heavily on revenues from access to INTELSAT (as opposed to access being simply a component of the retail price charged for an end product, as is the case for most foreign signatories).

As an economic matter, I find this argument to be at a minimum debatable. Further, I have concerns about our ability to police compliance with the restriction. I support today's decision, however, because it is a further step in opening U.S. markets to the global satellite marketplace (and a step, I might add, that goes above and beyond our commitments under the WTO Basic Telecom Agreement). Simply put, I would have preferred to go even further than we have done today in championing open markets by not adopting this restriction.

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